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AUTHOR Apostoleris, Nicholas H.
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ABSTRACT

This study examined factors related to intrinsic motivation for learning and psychological need fulfillment in the home-school setting. Participating in the study were 60 families who home-schooled at least 1 child between ages 6 and 16. Families were recruited directly at meetings of home-schooling groups in Massachusetts. Parents were interviewed in their homes. The parent and participating child separately completed questionnaires; questionnaires were read aloud to younger children. Intrinsic motivation for learning was operationalized as the sum of subscales from the Scale of Intrinsic Versus Extrinsic Orientation in the Classroom, with items adapted for home rather than classroom education. These subscales included preference for challenge, curiosity/interest, independent mastery, independent judgment, and internal criteria for success. The child's personality was assessed using a four-factor measure of personality (agreeableness, intellect, extroversion, neuroticism). The degree to which psychological needs of autonomy, competence, and relatedness were being fulfilled was measured through child questionnaires. Findings indicated that parental supportiveness of autonomy was related with the child's intrinsic motivation for learning, as was the child's intellect personality factor score, the number of years the child had been home-schooled, and the child's age. Environmental conditions marked by high levels of autonomy supportiveness and support for perceived relatedness were associated with higher levels of children's psychological need fulfillment, as were high scores on the intellect personality factors. (KB)

The Development of Children's Motivation in the Homeschool Setting

Nicholas H. Apostoleris

Clark University

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Nicholas H. Apostoleris, Department of Psychology, Clark University,
950 Main Street, Worcester, Massachusetts, 01610
email: napostoleris@clarku.edu

ABSTRACT

Using the perspective of Self-Determination Theory, this study examined factors related to intrinsic motivation for learning and psychological need fulfillment in the homeschool setting. Sixty homeschooling families participated, with one parent and one child being interviewed and completing questionnaires.

Parental Autonomy Supportiveness was correlated with the child's Intrinsic Motivation for Learning, as was the child's Intellect Personality Factor score, the number of years the child had been homeschooled, and the child's age.

Environmental conditions marked by high levels of Autonomy Supportiveness and Relatedness Supportiveness were associated with higher levels of children's psychological need fulfillment, as were high scores on the Intellect Personality Factor.

INTRODUCTION

This is a study of intrinsic motivation and psychological need fulfillment in the homeschool environment. In 1991, the number of homeschooled children was estimated at 500,000 (Lines, 1991), with current researchers generally agreeing that there has been a significant increase in this population in the past decade. The term "homeschooling" does not refer only to families who simulate a school-like experience primarily at home, but rather includes these "school-at-home" families, as well as families who "unschool," meaning they seek to have the learning experiences be completely initiated by the child, and families with religious rationales for not having their children attend traditional schools. Characteristic of all home schools is a very low student/teacher ratio, and an extremely high level of parental involvement in the child's education.

Families choose to homeschool their children for a wide range of reasons resulting in a particularly rich variety of educational environments. Some families choose to homeschool to provide educational environments with maximum autonomy (choicefulness) afforded the children, while other families choose to homeschool to impart a particular moral or religious set of teachings to their children. The extreme level of variety in educational philosophies found in homeschooling families was a key reason for studying this population.

The current research was undertaken to investigate homeschooled children's motivation and the factors related to how well their basic psychological needs were being met. Taking the perspective of Self-Determination Theory (Deci & Ryan, 1985), homeschooling families were evaluated regarding the supportiveness of basic psychological needs in the home learning environment, as well as regarding the child's intrinsic motivation for learning and the overall fulfillment of the basic psychological needs (autonomy, competence, and relatedness) posited by Self-Determination theory.

METHOD

Participants

Sixty families who homeschooled at least one child between ages six and sixteen participated in the study. Participating families were recruited directly at meetings of homeschooling groups in Massachusetts. In the cases where a family homeschooled more than one child, the single child participant per family was chosen by the researcher based on age and sex of the child. Families were offered \$20 for their participation in the study.

Procedure

Participants were seen in their homes by the researcher and an assistant. A structured interview was conducted with the parent, and the parent and child separately completed questionnaires. The child questionnaires were read to the younger child participants by the research assistant.

Measures

Intrinsic Motivation for Learning was operationalized as the sum of the subscales from Harter's "Scale of Intrinsic Versus Extrinsic Orientation in the Classroom" (1981), a questionnaire which was somewhat modified for the current study to adapt the items for home education rather than classroom education. These subscales include: Preference for Challenge; Curiosity/Interest; Independent Mastery; Independent Judgment; and Internal Criteria for Success.

The child's personality was assessed using an instrument in development at the University of Georgia which found a four factor structure for children's personality (I. Agreeableness; II. Intellect; III. Extraversion; IV. Neuroticism).

The degree to which basic psychological needs of autonomy, competence, and relatedness were being fulfilled was measured through the following child questionnaires.

Perceived Autonomy

Overall Perceived Autonomy was assessed using the Self-regulatory Styles Questionnaire to assess the degree to which the child is intrinsically self-regulated in his or her overall functioning (Ryan & Connell, 1989). The questionnaire was modified for the homeschool population.

Perceived Competence

Perceived Competence was assessed using "The Perceived Competence Scale for Children" (Harter, 1982) which was slightly modified for use in homeschool settings. This measure yielded the following subscales: General Perceived Competence (Self esteem); Perceived Social Competence; Perceived Cognitive Competence; Perceived Physical Competence (not used in this study).

Perceived Relatedness

Perceived relatedness for the child is understood as encompassing relatedness to parents, relatedness to siblings, and relatedness to friends. Perceived relatedness has two dimensions,

Perceived emotional security and Perceived need for a closer relationship.

Perceived emotional security with parents, siblings, and friends was assessed using an instrument based on Connell and Wellborn (1990) which asked the child to rate how often he or she felt relaxed, ignored, happy, mad, bored, important, or unhappy when with mother, father, siblings, and friends. Perceived need for a closer relationship with parents, siblings, and friends was assessed using an instrument (Connell & Wellborn, 1990) which asked the child to evaluate how true a series of "I wish" statements were, including: "I wish my mother would spend more time with me;" "I wish I could talk about more things with my friends;" "I wish my siblings knew me better."

RESULTS

A Principal Components factor analysis was performed on variables hypothesized to comprise the Autonomy Supportiveness, Competence Supportiveness, and Relatedness Supportiveness constructs. A four factor solution emerged in which the Autonomy Supportiveness (eigenvalue 4.4) and Competence Supportiveness (eigenvalue 1.5) variables loaded on distinct factors, but the Relatedness Supportiveness variables loaded on two factors, which corresponded to Spousal Involvement/Family Functioning (eigenvalue 1.3), and Relatedness to the Community (eigenvalue 1.2).

Intrinsic Motivation for Learning

Autonomy Supportiveness and Intrinsic Motivation for Learning

The Autonomy Supportiveness Factor derived from the parent interview was significantly related to the child's Overall Intrinsic Motivation ($r = .45, p < .001$), to the child's Curiosity ($r = .46, p < .001$) and to the child's Independent Judgment ($r = .34, p < .01$).

Competence Supportiveness and Intrinsic Motivation for Learning

The Competence Supportiveness factor, derived from the parent interview, was related neither to the child's Overall Intrinsic Motivation nor to any of the Intrinsic Motivation subscales.

Relatedness Supportiveness and Intrinsic Motivation for Learning

The Relatedness Supportiveness factors, Spousal Involvement/Family Functioning and Relatedness to the Community, were unrelated to either the child's Overall Intrinsic Motivation or to any of the Intrinsic Motivation subscales.

Child's Personality and Intrinsic Motivation for Learning

Intellect was significantly correlated with Overall Intrinsic Motivation ($r = .44, p < .001$), as was Curiosity ($r = .51, p < .001$), and Independent Judgment ($r = .32, p < .01$).

Intellect was related to Internal Criteria for Success and Independent Mastery at levels approaching significance.

Mother's Education and Intrinsic Motivation for Learning

Mother's years of formal education was hypothesized to predict the child's Intrinsic Motivation for Learning. Mother's education, however, was significantly related only to Independent Judgment ($r = .23, p < .04$).

Psychological Need Fulfillment

Perceived Autonomy

Parental Autonomy Supportiveness was hypothesized to be related to the child's Perceived Autonomy (Ryan & Connell, 1989). The Autonomy Supportiveness Factor derived from the parent interview was strongly correlated with the child's perceived autonomy ($r = .42, p < .001$). Parental Competence Supportiveness was negatively related to the child's Perceived Autonomy ($r = -.32, p < .01$). Parental Relatedness Supportiveness was hypothesized to be related to the child's Perceived Autonomy. The Community Factor from the parent interview was unrelated to the child's Perceived Autonomy and the Spousal Involvement/Family Factor was only marginally related to the child's Perceived Autonomy ($r = .18, p < .10$).

The four personality factors, Agreeableness, Intellect, Extraversion, and Neuroticism were examined as to possible relationships with Perceived Autonomy. Only Factor 2, Intellect, was significantly correlated with Perceived Autonomy ($r = .39, p < .003$).

Perceived Competence

Perceived Competence was measured by the General Perceived Competence/Self Esteem, Social, and Cognitive subscales of the Perceived Competence questionnaire. General Perceived Competence was correlated with the Autonomy Supportiveness Factor ($r = .28, p < .04$). Social Perceived Competence was related to the Community Factor from the parent interview ($r = .35, p < .01$) and to the Agreeableness personality subscale ($r = .28, p < .04$). Cognitive Perceived Competence was related to the Autonomy Supportiveness Factor ($r = .30, p < .03$) and to the Community factor from the parent interview ($r = .40, p < .005$), as well as to the Intellect personality subscale ($r = .26, p < .05$).

Perceived Relatedness

Perceived Relatedness is operationalized here as the subscales from the "Feelings" questionnaire (Connell & Wellborn, 1990) which assess the emotional security of the child in the particular relationship, by the subscales of the "I Wish" questionnaire (Connell & Wellborn, 1990) which assess the child's perceived need for a closer relationship to friends and family, and by the General Competence/Self Esteem and Social Competence subscales of the Perceived Competence questionnaire.

Emotional security with father was related to the Spousal Involvement/Family Factor ($r =$

.28, $p < .02$) and Emotional security with friends was related to the Autonomy Supportiveness Factor ($r = .24$, $p < .04$).

The child's expressed need for a closer relationship with mothers and siblings were unrelated to any of the Basic Need Supportiveness Factors in this population. The child's expressed need for a closer relationship with father was positively related to the Competence Supportiveness Factor ($r = .26$, $p < .03$). The child's expressed need for closer friendship relationships was negatively related to the Spousal Involvement/Family Factor ($r = -.25$, $p < .03$). Self-esteem was significantly related to the Autonomy Supportiveness Factor ($r = .28$, $p < .04$).

Perceived Relatedness was hypothesized as being related to the child's personality. Emotional Security with mother was related to the Agreeableness Personality Factor ($r = .30$, $p < .02$). Emotional security with father was unrelated to personality. Emotional security with siblings was negatively related to the Neuroticism Personality Factor ($r = -.30$, $p < .02$). Emotional security with friends was significantly related to Intellect ($r = .45$, $p < .001$) and Extraversion ($r = .29$, $p < .03$). The child's expressed need for a closer relationship with mother was negatively related to Intellect ($r = -.28$, $p < .03$). The child's expressed need for a closer relationship with friends was negatively related to Intellect ($r = -.34$, $p < .01$).

Age and Intrinsic Motivation

Age was positively related to Intrinsic Motivation ($r = .32$, $p < .01$). To determine whether this relationship pertained at all levels of Autonomy Supportiveness, correlations were undertaken at low, medium, and high levels of Autonomy Supportiveness. Only for the High Autonomy Supportiveness condition was the relationship between age and Overall Intrinsic Motivation significant ($r = .61$, $p < .01$).

The number of years the child was homeschooled was positively related to Overall Intrinsic Motivation ($r = .27$, $p < .02$) while the number of years of formal schooling was unrelated to Overall Intrinsic Motivation ($r = .07$, $p > .50$).

Mother's Education and Environmental Variables

Mother's years of formal education was also hypothesized to predict Autonomy Supportiveness. The Autonomy Supportiveness Factor from the parent interview was only marginally correlated with mother's education level ($r = .18$, $p < .09$). Mother's education was unrelated to the Competence Supportiveness Factor or the Community Factor, but was significantly related to the Spousal Involvement/Family Factor ($r = .35$, $p < .008$).

DISCUSSION

As hypothesized, Autonomy Supportiveness was found to be related to the child's Intrinsic Motivation for Learning. The strength of the Autonomy Supportiveness-Intrinsic Motivation for Learning relationship may be due to the high level of variance in Autonomy Supportiveness in the studied population. The only other significant correlate of the child's Intrinsic Motivation for Learning was the Intellect personality factor.

Relatedness Supportiveness is a construct new to this study, and its two factor structure was unexpected. That a distinction was found between the Spousal Involvement/Family Factor and the Relatedness to the Community Factor is not overly surprising. Conceptually, these two factors can be seen as categorizing families along Healthy/Distressed, and Outward/Inward Orientation dimensions.

Contrary to findings with schooled children (Green & Foster, 1986), in these homeschooled families, Intrinsic Motivation for Learning was higher in older children, especially in families with high Autonomy Supportiveness. Intrinsic Motivation was also positively related to the number of years the child was homeschooled. Thirty of the 60 participating children had spent some time in formal school, with years of formal schooling unrelated to Intrinsic Motivation. The research design does not allow for causal conclusions, but these findings warrant further investigation as to whether Intrinsic Motivation increases with years of homeschooling in a longitudinal sense.

The child's Perceived Autonomy was positively related to Intellect and parental Autonomy Supportiveness and negatively related to parental Competence Supportiveness. The negative relationship with Competence Supportiveness was unexpected.

The child's General Perceived Competence/Self Esteem was related to Autonomy Supportiveness. Cognitive Perceived Competence was also related to Autonomy Supportiveness, as well as to the Relatedness to the Community Factor and Intellect.

Aspects of the child's Perceived Relatedness were positively related to the environmental conditions of Autonomy Supportiveness and Spousal Involvement/Family Functioning, and to the Extraversion, Intellect, and Agreeableness personality factors and negatively to the Neuroticism personality factor.

Overall, Autonomy Supportiveness had a wide range of favorable child correlates, as did the Relatedness Supportiveness Factors. In the studied families, Competence Supportiveness had several unfavorable child correlates which were unexpected and require further analysis.

Additional analyses on the current data will focus on the children's relationships with family and friends. Planned future research includes longitudinally studying homeschooling families, and studying families who homeschool children meeting criteria for ADHD and/or LD.

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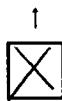
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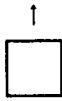
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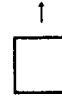
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